VERIFICATION

Ref No.: NEI-FCCE-1-E0712010

Date of Issue: Jan. 04, 2008

This is to certify that the product listed in follows was (were) tested in the Neutron EMC Laboratory to comply with the criteria limits Class A of conducted and radiated emissions of the Technical Standards FCC Part 15, Subpart B, established by the FCC, USA.

Equipment	x86 Ready-to-Run Embedded Computer
Model Name	V462; V462-CE; V462-T-CE; V462-XPE; V462-T-XPE; V464; V464-CE;
	V464-T-CE; V464-XPE; V464-T-XPE; V466; V466-CE; V466-T-CE;
	V466-XPE; V466-T-XPE; V468; V468-CE; V468-T-CE; V468-XPE;
	V468-T-XPE
Brand Name	MOXA
Applicant	Moxa Inc.
Address	Fl. 4, No. 135, Lane 235, Pao-Chiao Rd. Shing Tien City, Taipei, Taiwan
Measurement	ANSI C 63.4 (2003)
Method	CISPR 22: 1997+A1: 2000
	ICES-003: 2004

The test data, data evaluation, and equipment configuration contained in our test report (Ref No. NEI-FCCE-1-E0712010) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of NVLAP and TAF according to the ISO-17025 quality assessment standard and technical standard(s). The test data contained in the referenced test report relate only to the EUT sample and item(s) tested.

Andy Chiu

Authorized Signatory

NEUTRON

NVLAP Lab Code: 200145-0

Neutron Engineering Inc.

132-1, Lane 329, Sec.2, Palain Rd.,

Shijr City, Taipei, Taiwan 221, ROC.

TEL : +886-2-2646-5426

FAX : +886-2-2646-6815

ilac-MRA TAF Testing Laboratory 0659

FCC Test Report

Issued Date : Jan. 04, 2008
Project No. : E0712010
Equipment : x86 Ready-to-Run Embedded Computer
Model Name : V462; V462-CE; V462-T-CE; V462-XPE; V462-T-XPE; V464; V464-CE; V464-T-CE; V464-XPE; V464-T-XPE; V466; V466-CE; V466-T-CE; V466-XPE; V466-T-XPE; V468; V468-CE; V468-T-CE; V468-XPE; V468-T-XPE

Applicant : Moxa Inc.
Address : Fl. 4, No. 135, Lane 235, Pao-Chiao Rd. Shing Tien City, Taipei, Taiwan

Tested by:
Neutron Engineering Inc. EMC Laboratory
Date of Test:
Oct. 25, 2007 ~ Jan. 02, 2008

Testing Engineer: Alan Liu for (Peter Li)

Technical Manager: (Jeff Yang)

Authorized Signatory : (Andy Chiu)

NEUTRON ENGINEERING INC.

No. 132-1, Lane 329, Sec. 2, Palain Rd., Shijr City, Taipei, Taiwan
TEL : (02) 2646-5426 FAX : (02) 2646-6815

NVLAP Lab Code: 200145-0

ilac-MRA TAF Testing Laboratory 0659

VCCI R-1347 C-1410

Declaration

Neutron represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with the standards traceable to National Measurement Laboratory (**NML**) of **R.O.C.**, or National Institute of Standards and Technology (**NIST**) of **U.S.A.**

Neutron's reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. **Neutron** shall have no liability for any declarations, inferences or generalizations drawn by the client or others from **Neutron** issued reports.

Neutron's reports must not be used by the client to claim product endorsement by the authorities or any agency of the Government.

This report is the confidential property of the client. As a mutual protection to the clients, the public and **Neutron-self**, extracts from the test report shall not be reproduced except in full with **Neutron**'s authorized written approval.

Neutron's laboratory quality assurance procedures are in compliance with the **ISO Guide 17025** requirements, and accredited by the conformity assessment authorities listed in this test report.

Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

Table of Contents Page

1. CERTIFICATION

Equipment :	x86 Ready-to-Run Embedded Computer
Brand Name :	MOXA
Model Name :	V462; V462-CE; V462-T-CE; V462-XPE; V462-T-XPE; V464; V464-CE; V464-T-CE; V464-XPE; V464-T-XPE; V466; V466-CE; V466-T-CE; V466-XPE; V466-T-XPE; V468; V468-CE; V468-T-CE; V468-XPE; V468-T-XPE
Applicant :	Moxa Inc.
Date of Test :	Oct. 25, 2007 ~ Jan. 02, 2008
Standards :	FCC Part 15, Subpart B, Class A CISPR 22: 1997+A1: 2000, Class A ICES-003: 2004, Class A ANSI C63.4-2003

The above equipment has been tested and found compliance with the requirement of the relative standards by Neutron Engineering Inc. EMC Laboratory.
The test data, data evaluation, and equipment configuration contained in our test report (Ref No. NEI-FCCE-1-E0712010) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of NVLAP and TAF according to the ISO-17025 quality assessment standard and technical standard(s).

2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

Emission				
Standard	Test Item	Limit	Judgment	Remark
FCC Part15, Subpart B CISPR 22:1997+A1: 2000 ICES-003: 2004	Conducted Emission	Class A	PASS	
	Radiated Emission	Class A	PASS	

NOTE:

(1) " N/A" denotes test is not applicable in this Test Report.

(2) For client's request and manual description, the test will not be executed.

2.1 TEST FACILITY

The test facilities used to collect the test data in this report is **C01/OS01** at the location of No.132-1, Lane 329, Sec. 2, Palain Road, Shijr City, Taipei, Taiwan.

2.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement **y** ± **U**，where expended uncertainty **U** is based on a standard uncertainty multiplied by a coverage factor of **k=2**，providing a level of confidence of approximately **95**%。

A. Conducted Measurement :

Test Site	Method	Measurement Frequency Range	U，(dB)	NOTE
C01	ANSI	150 KHz ~ 30MHz	1.94	

B. Radiated Measurement :

Test Site	Method	Measurement Frequency Range	Ant. H / V	U，(dB)	NOTE
OS-01	ANSI	30MHz ~ 200MHz	V	3.82	
		30MHz ~ 200MHz	H	3.60	
		200MHz ~ 1,000MHz	V	3.86	
		200MHz ~ 1,000MHz	H	3.94	
OS-02	ANSI	30MHz ~ 200MHz	V	2.48	
		30MHz ~ 200MHz	H	2.16	
		200MHz ~ 1,000MHz	V	2.50	
		200MHz ~ 1,000MHz	H	2.66	

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	x86 Ready-to-Run Embedded Computer
Brand Name	MOXA
Model Name	V462; V462-CE; V462-T-CE; V462-XPE; V462-T-XPE; V464; V464-CE; V464-T-CE; V464-XPE; V464-T-XPE; V466; V466-CE; V466-T-CE; V466-XPE; V466-T-XPE; V468; V468-CE; V468-T-CE; V468-XPE; V468-T-XPE
OEM Brand/Model Name	N/A
Model Difference	Please refer to Note 2.
Product Description	The EUT is a x86 Ready-to-Run Embedded Computer. Based on the application, features, or specification exhibited in User's Manual, the EUT is considered as an ITE/Computing Device. More details of EUT technical specification, please refer to the User's Manual.
Power Source	DC Voltage supplied from AC/DC adapter.
Power Rating	AC I/P 100-240V~50-60Hz, 1.5A / DC O/P 24V, 2.5A
Connecting I/O Port(s)	Please refer to the User's Manual
Products Covered	AC/DC Adapter(Model Name: 3A-621DA24)
EUT Modification(s)	N/A

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
2. There are some models based on similar electrical circuit except the difference of list below:

Model No.	I/O Function	Main Board	I/O board
V462; V462-CE; V462-T-CE; V462-XPE; V462-T-XPE	2xLAN, 2xRS-232, 2xRS-232/422/485, PCMCIA	V460 Main Board	V460 IO
V464; V464-CE; V464-T-CE; V464-XPE; V464-T-XPE	4xLAN, 2xRS-232, 2xRS-232/422/485		
V466; V466-CE; V466-T-CE; V466-XPE; V466-T-XPE	4xLAN, 2xRS-232, 2xRS-232/422/485, 8 Ports Dump Switch		V460 SWITCH
V468; V468-CE; V468-T-CE; V468-XPE; V468-T-XPE	4xLAN, 2xRS-232, 2xRS-232/422/485, 8xDI, 8xDO		V460 IO

All the above models were tested, and the model: V466; V462 were found to be the worst case during the pr-scanning test. These models of the worst case were used for final testing and collecting test data included in this report.

3.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

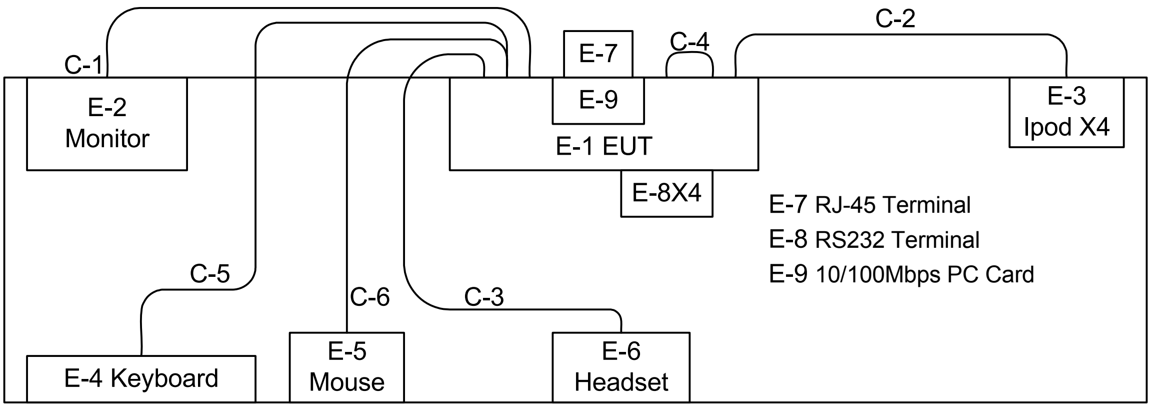
Pretest Test Mode	Description
Mode 1	FULL SYSTEM (For Model No.:V466; V462; V464; V468)

For Conducted Test	
Final Test Mode	Description
Mode 1	FULL SYSTEM (For Model No.: V462 & V466)

For Radiated Test	
Final Test Mode	Description
Mode 1	FULL SYSTEM (For Model No.: V462 & V466)

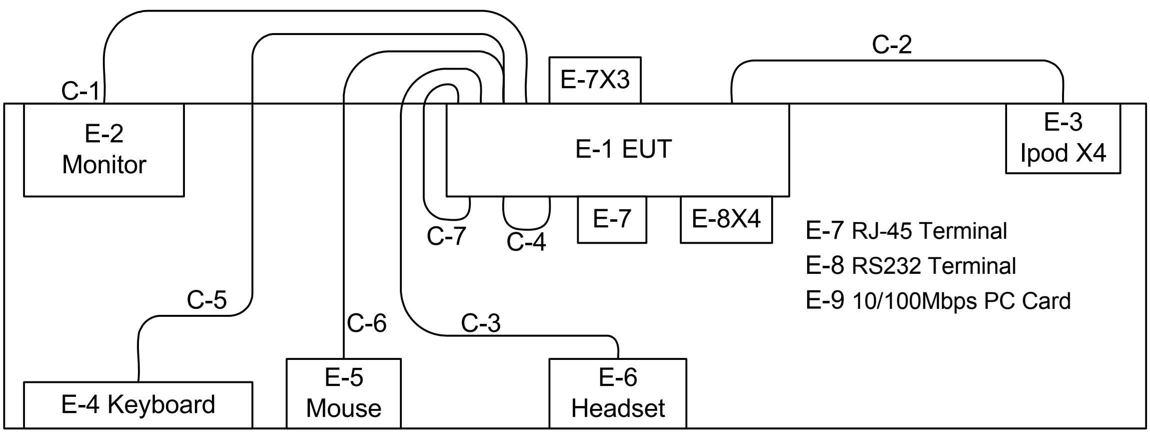
3.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Model No.: V462



C-1 D-SUB Cable
C-2 USB Cable x2
C-3 Audio Cable
C-4 RJ-45 Cable
C-5 PS/2 Cable
C-6 PS/2 Cable

Model No.: V466



C-1 D-SUB Cable
C-2 USB Cable x4
C-3 Audio Cable
C-4 RJ-45 Cable
C-5 PS/2 Cable
C-6 PS/2 Cable
C-7 RJ-45 Cable

3.4 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	FCC ID	Series No.	Note
E-1	x86 Ready-to-Run Embedded Computer	MOXA	V462; V466	DOC	N/A	EUT
E-2	19" LCD Monitor	Samsung	SyncMaster 193P	DOC	DI19H4JXC05517A	
E-3	iPod nano	Apple	A1137	DOC	YM63604QUPR	
E-4	PS/2 K/B	Logitech	Y-SJ17(ACK260A)	DOC	SYU44664880	
E-5	PS/2 Mouse	Logitech	M-SBF69	DOC	HCA44601156	
E-6	Headset	Shiern-Chiu	KHM-108	N/A	N/A	
E-7	RJ-45 Terminal	N/A	N/A	N/A	N/A	
E-8	RS232 Terminal	N/A	N/A	N/A	N/A	
E-9	10/100Mbps PC Card	JAHT	JN-110P3	DOC	N/A	

Item	Shielded Type	Ferrite Core	Length	Note
C-1	YES	YES	1.8M	
C-2	YES	NO	1.0M	
C-3	NO	NO	1.8M	
C-4	NO	NO	0.1M	
C-5	YES	NO	1.5M	
C-6	YES	NO	1.5M	
C-7	NO	NO	1.9M	

Note:

(1) The support equipment was authorized by Declaration of Conformity.
(2) For detachable type I/O cable should be specified the length in cm in『Length』column.

4. EMC EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 POWER LINE CONDUCTED EMISSION (FREQUENCY RANGE 150KHZ-30MHZ)

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)	
	Quasi-peak	Average	Quasi-peak	Average
0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *
0.50 -5.0	73.00	60.00	56.00	46.00
5.0 -30.0	73.00	60.00	60.00	50.00

Note:

(1) The tighter limit applies at the band edges.

(2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

4.1.2 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	LISN	Rolf Heine	NNB-2/16Z	98053	Dec. 30, 2008
2	LISN	EMCO	3816/2	00042990	Jan. 25, 2008
3	Pulse Limiter	Electro-Metrics	EM-7600	112644	Nov. 27, 2008
4	50Ω Terminator	N/A	N/A	N/A	May.13, 2009
5	Test Cable	N/A	C01	N/A	Oct. 10, 2008
6	EMI Test Receiver	R&S	ESCI	100082	Mar. 08, 2008

Remark: ” N/A” denotes No Model Name , Serial No. or No Calibration specified.

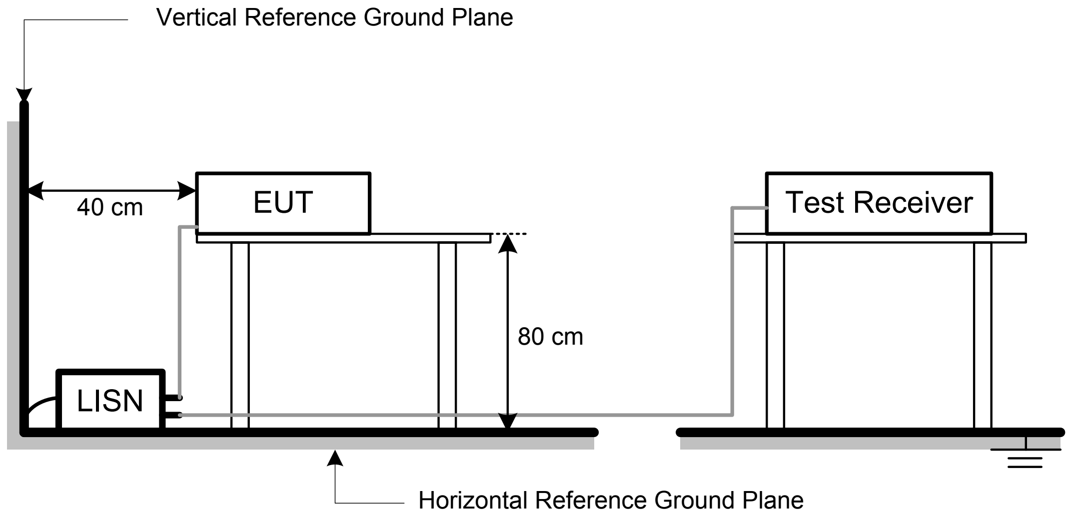
4.1.3 TEST PROCEDURE

a. The EUT was placed 0.4 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
d. LISN at least 80 cm from nearest part of EUT chassis.
e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.1.4 DEVIATION FROM TEST STANDARD

No deviation

4.1.5 TEST SETUP



4.1.6 EUT OPERATING CONDITIONS

The EUT exercise program (EMC.exe) used during radiated and/or conducted emission measurement was designed to exercise the various system components in a manner similar to a typical use. The program contained on a PC hard disk and is auto-starting on power-up. Once loaded, the program sequentially exercises each system component in turn. The sequence used is:

1. Read (write) from (to) mass storage device (iPod).
2. Send "H" pattern to video port device (Monitor).
3. Send " H " pattern to serial port device.
4. Repeated from 2 to 3 continuously.

As the keyboard and mouse are strictly input devices, no data is transmitted to (from) them during test. They are, however, continuously scanned for data input activity.

4.1.7 TEST RESULTS

E.U.T :	x86 Ready-to-Run Embedded Computer	Model Name :	V462
Temperature :	22°C	Relative Humidity :	54%
Pressure :	1011 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	FULL SYSTEM		

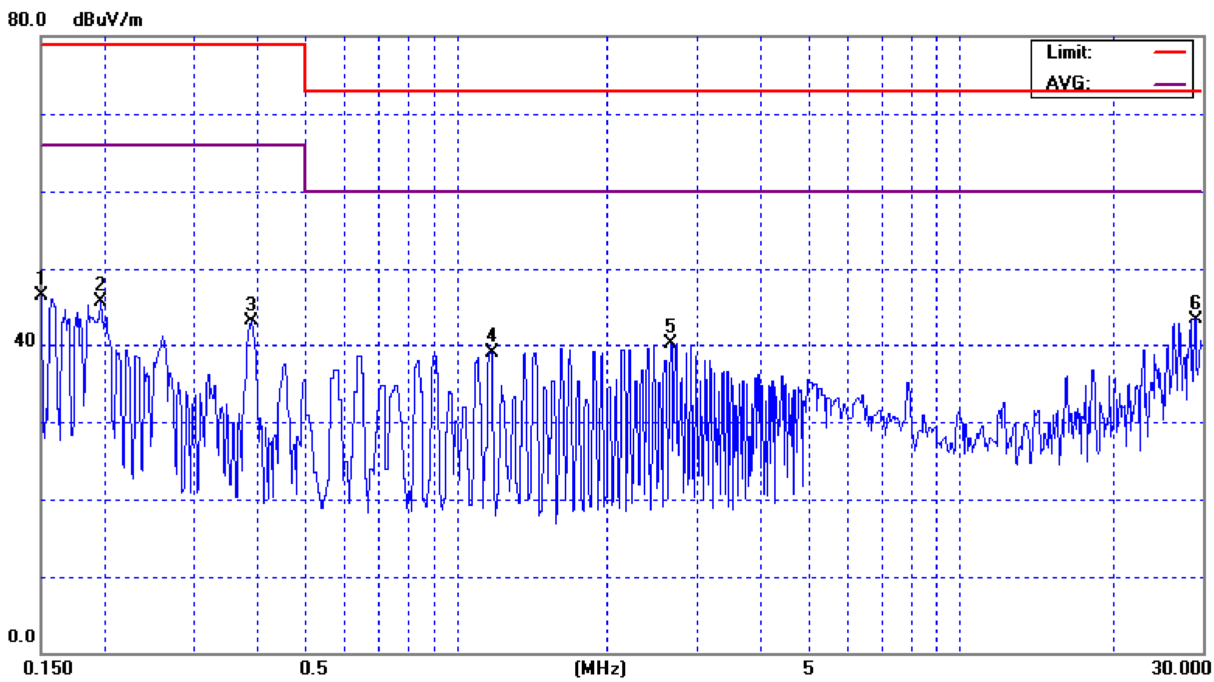
Freq. (MHz)	Terminal L/N	Measured(dBuV)		Limits(dBuV)		Margin (dB)	Note
		QP-Mode	AV-Mode	QP-Mode	AV-Mode		
0.15	Line	46.51	*	79.00	66.00	-32.49	(QP)
0.20	Line	45.66	*	79.00	66.00	-33.34	(QP)
0.39	Line	43.09	*	79.00	66.00	-35.91	(QP)
1.17	Line	38.99	*	73.00	60.00	-34.01	(QP)
2.66	Line	40.10	*	73.00	60.00	-32.90	(QP)
29.25	Line	43.26	*	73.00	60.00	-29.74	(QP)

Remark

(1) Reading in which marked as QP means measurements by using are Quasi-Peak Mode with Detector BW=9KHz;SPA setting in RBW=10KHz,VBW =10KHz, Swp. Time = 0.3 sec./MHz。Reading in which marked as AV means measurements by using are Average Mode with instrument setting in RBW=1MHz,VBW=10Hz, Swp. Time =0.3 sec./MHz。

(2) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform。In this case, a " * " marked in AVG Mode column of Interference Voltage Measured。

(3) Measuring frequency range from 150KHz to 30MHz。



E.U.T :	x86 Ready-to-Run Embedded Computer	Model Name :	V462
Temperature :	22°C	Relative Humidity :	54%
Pressure :	1011 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	FULL SYSTEM		

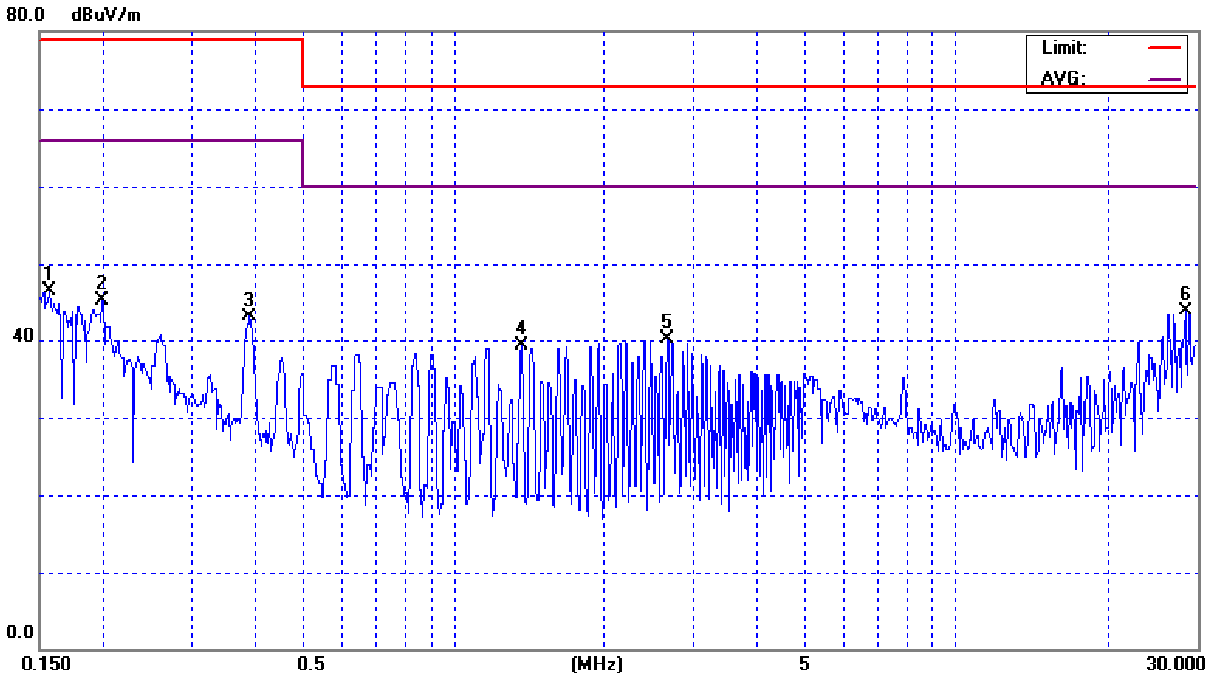
Freq. (MHz)	Terminal L/N	Measured(dBuV)		Limits(dBuV)		Margin (dB)	Note
		QP-Mode	AV-Mode	QP-Mode	AV-Mode		
0.16	Neutral	46.48	*	79.00	66.00	-32.52	(QP)
0.20	Neutral	45.37	*	79.00	66.00	-33.63	(QP)
0.39	Neutral	43.02	*	79.00	66.00	-35.98	(QP)
1.36	Neutral	39.21	*	73.00	60.00	-33.79	(QP)
2.66	Neutral	40.03	*	73.00	60.00	-32.97	(QP)
28.70	Neutral	43.82	*	73.00	60.00	-29.18	(QP)

Remark

(1) Reading in which marked as QP means measurements by using are Quasi-Peak Mode with Detector BW=9KHz;SPA setting in RBW=10KHz,VBW =10KHz, Swp. Time = 0.3 sec./MHz。 Reading in which marked as AV means measurements by using are Average Mode with instrument setting in RBW=1MHz,VBW=10Hz, Swp. Time =0.3 sec./MHz。

(2) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform。In this case, a " * " marked in AVG Mode column of Interference Voltage Measured。

(3) Measuring frequency range from 150KHz to 30MHz。



E.U.T :	x86 Ready-to-Run Embedded Computer	Model Name :	V466
Temperature :	22°C	Relative Humidity :	54%
Pressure :	1011 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	FULL SYSTEM		

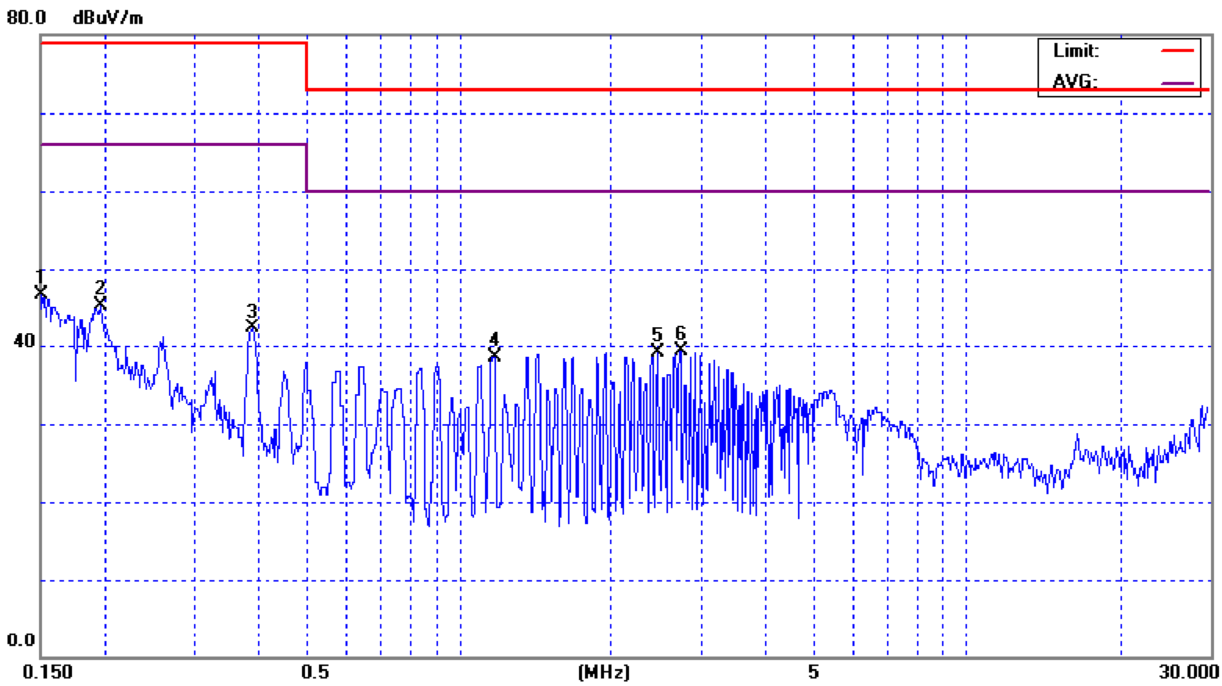
Freq. (MHz)	Terminal L/N	Measured(dBuV) QP-Mode	Measured(dBuV) AV-Mode	Limits(dBuV) QP-Mode	Limits(dBuV) AV-Mode	Margin (dB)	Note
0.15	Line	46.79	*	79.00	66.00	-32.21	(QP)
0.20	Line	45.30	*	79.00	66.00	-33.70	(QP)
0.39	Line	42.27	*	79.00	66.00	-36.73	(QP)
1.17	Line	38.55	*	73.00	60.00	-34.45	(QP)
2.46	Line	39.16	*	73.00	60.00	-33.84	(QP)
2.72	Line	39.23	*	73.00	60.00	-33.77	(QP)

Remark

(1) Reading in which marked as QP means measurements by using are Quasi-Peak Mode with Detector BW=9KHz;SPA setting in RBW=10KHz,VBW =10KHz, Swp. Time = 0.3 sec./MHz。Reading in which marked as AV means measurements by using are Average Mode with instrument setting in RBW=1MHz,VBW=10Hz, Swp. Time =0.3 sec./MHz。

(2) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform。In this case, a " * " marked in AVG Mode column of Interference Voltage Measured。

(3) Measuring frequency range from 150KHz to 30MHz。



E.U.T :	x86 Ready-to-Run Embedded Computer	Model Name :	V466
Temperature :	22˚C	Relative Humidity :	54%
Pressure :	1011 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	FULL SYSTEM		

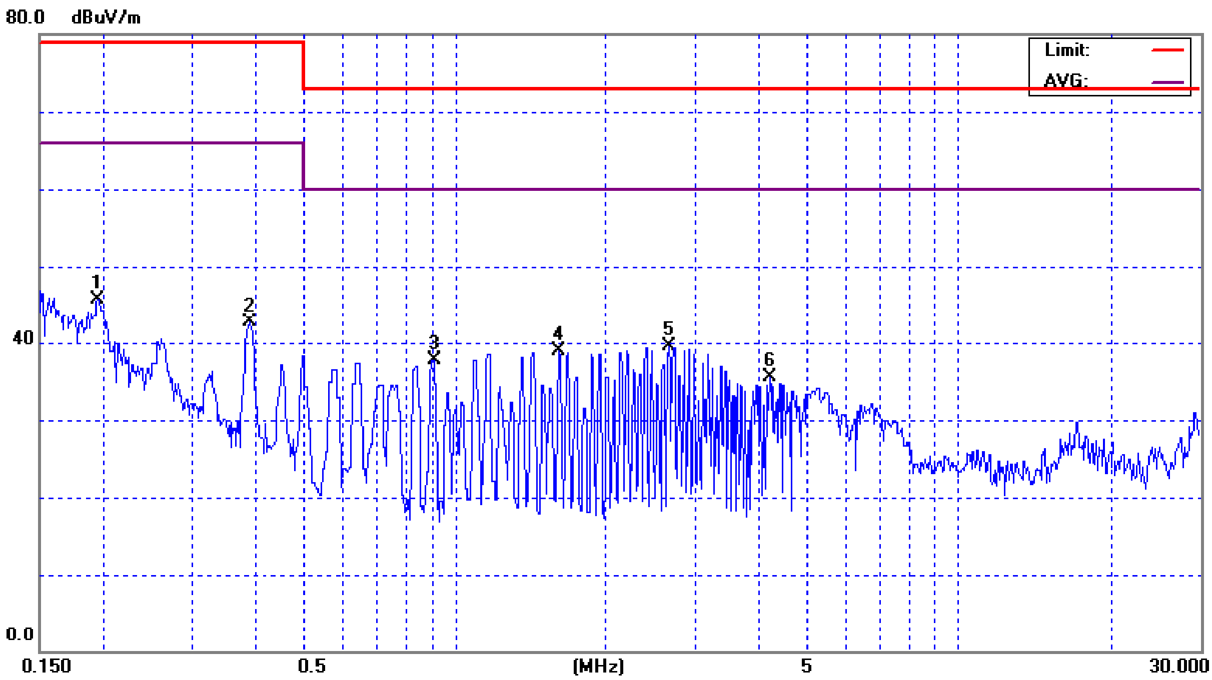
Freq. (MHz)	Terminal L/N	Measured(dBuV)		Limits(dBuV)		Margin (dB)	Note
		QP-Mode	AV-Mode	QP-Mode	AV-Mode		
0.20	Neutral	45.63	*	79.00	66.00	-33.37	(QP)
0.39	Neutral	42.61	*	79.00	66.00	-36.39	(QP)
0.91	Neutral	37.69	*	73.00	60.00	-35.31	(QP)
1.62	Neutral	38.98	*	73.00	60.00	-34.02	(QP)
2.66	Neutral	39.51	*	73.00	60.00	-33.49	(QP)
4.22	Neutral	35.54	*	73.00	60.00	-37.46	(QP)

Remark

(1) Reading in which marked as QP means measurements by using are Quasi-Peak Mode with Detector BW=9KHz;SPA setting in RBW=10KHz,VBW =10KHz, Swp. Time = 0.3 sec./MHz。Reading in which marked as AV means measurements by using are Average Mode with instrument setting in RBW=1MHz,VBW=10Hz, Swp. Time =0.3 sec./MHz。

(2) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform。In this case, a " * " marked in AVG Mode column of Interference Voltage Measured。

(3) Measuring frequency range from 150KHz to 30MHz。



4.2 RADIATED EMISSION MEASUREMENT

4.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT (BELOW 1000MHZ)

FREQUENCY (MHz)	Class A (at 10m)	Class B (at 10m)
	dBuV/m	dBuV/m
30 – 230	40	30
230 – 1000	47	37

Notes:

(1) The limit for radiated test was performed according to as following:
CISPR 22/ FCC PART 15B /ICES-003.

(2) The tighter limit applies at the band edges.

(3) Emission level (dBuV/m)=20log Emission level (uV/m).

LIMITS OF RADIATED EMISSION MEASUREMENT (ABOVE 1000MHZ)

FREQUENCY (MHz)	Class A (dBuV/m) (at 3m)		Class B (dBuV/m) (at 3m)	
	PEAK	AVERAGE	PEAK	AVERAGE
Above 1000	80	60	74	54

Notes:

(1) The limit for radiated test was performed according to FCC PART 15B.

(2) The tighter limit applies at the band edges.

(3) Emission level (dBuV/m)=20log Emission level (uV/m).

FREQUENCY RANGE OF RADIATED MEASUREMENT (FOR UNINTENTIONAL RADIATORS)

Highest frequency generated or Upper frequency of measurement used in the device or on which the device operates or tunes (MHz)	Range (MHz)
Below 1.705	30
1.705 – 108	1000
108 – 500	2000
500 – 1000	5000
Above 1000	5th harmonic of the highest frequency or 40 GHz, whichever is lower

4.2.2 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Log-Bicon Antenna	Schwarzbeck	VULB 9160	3176	Feb. 05, 2008
2	Test Cable	N/A	10M_OS01	N/A	Oct. 10, 2008
3	Test Cable	N/A	OS01-1/-2	N/A	Oct. 10, 2008
4	Pre-Amplifier	Anritsu	MH648A(OS01)	M09961	Oct. 10, 2008
5	EMI Test Receiver	R&S	ESCI	100080	Mar. 08, 2008
6	Antenna Mast	Chance Most	CMTB-1.5	N/A	N/A
7	Turn Table	Chance Most	CMTB-1.5	N/A	N/A

Remark: " N/A" denotes No Model Name / Serial No. and No Calibration specified.

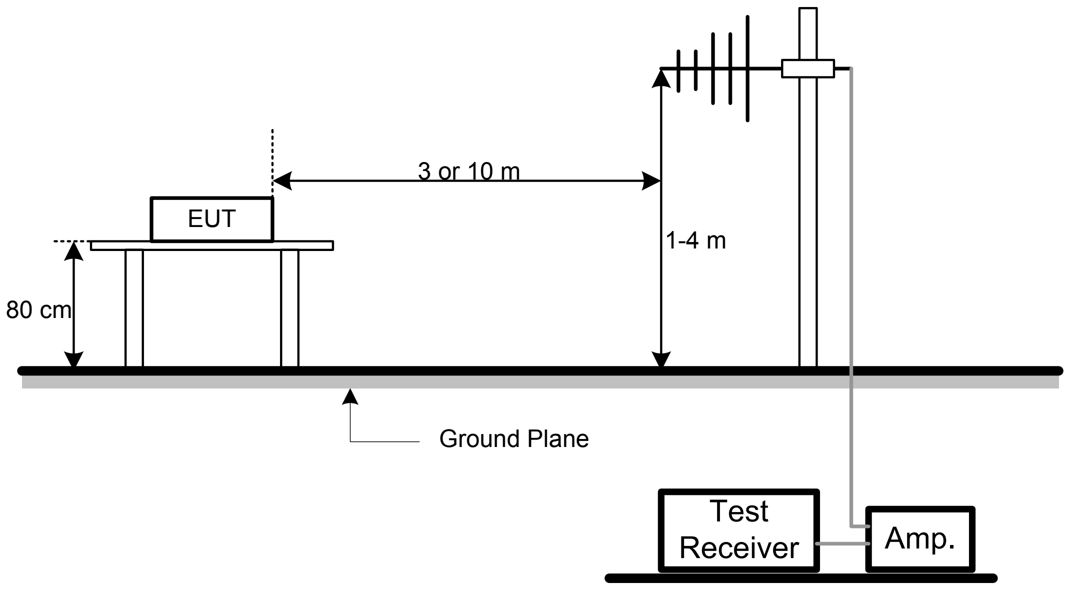
4.2.3 TEST PROCEDURE

a. The measuring distance of at 10 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3m or 10 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.
c. The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. The initial step in collecting radiated emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
f. For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.2.4 DEVIATION FROM TEST STANDARD

No deviation

4.2.5 TEST SETUP



4.2.6 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of **4.1.6** Unless otherwise a special operating condition is specified in the follows during the testing.

4.2.7 TEST RESULTS-BETWEEN 30MHZ AND 1000MHZ

E.U.T :	x86 Ready-to-Run Embedded Computer	Model Name :	V462
Temperature :	21˚C	Relative Humidity :	68%
Pressure :	1022 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	FULL SYSTEM		

Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
166.66	V	33.17	-3.57	29.60	40.00	- 10.40	
199.26	V	38.85	-6.25	32.60	40.00	- 7.40	
233.29	V	41.42	-4.99	36.43	47.00	- 10.57	
366.58	V	38.05	-0.97	37.08	47.00	- 9.92	
433.24	V	37.35	1.26	38.61	47.00	- 8.39	
799.81	V	29.32	7.99	37.31	47.00	- 9.69	

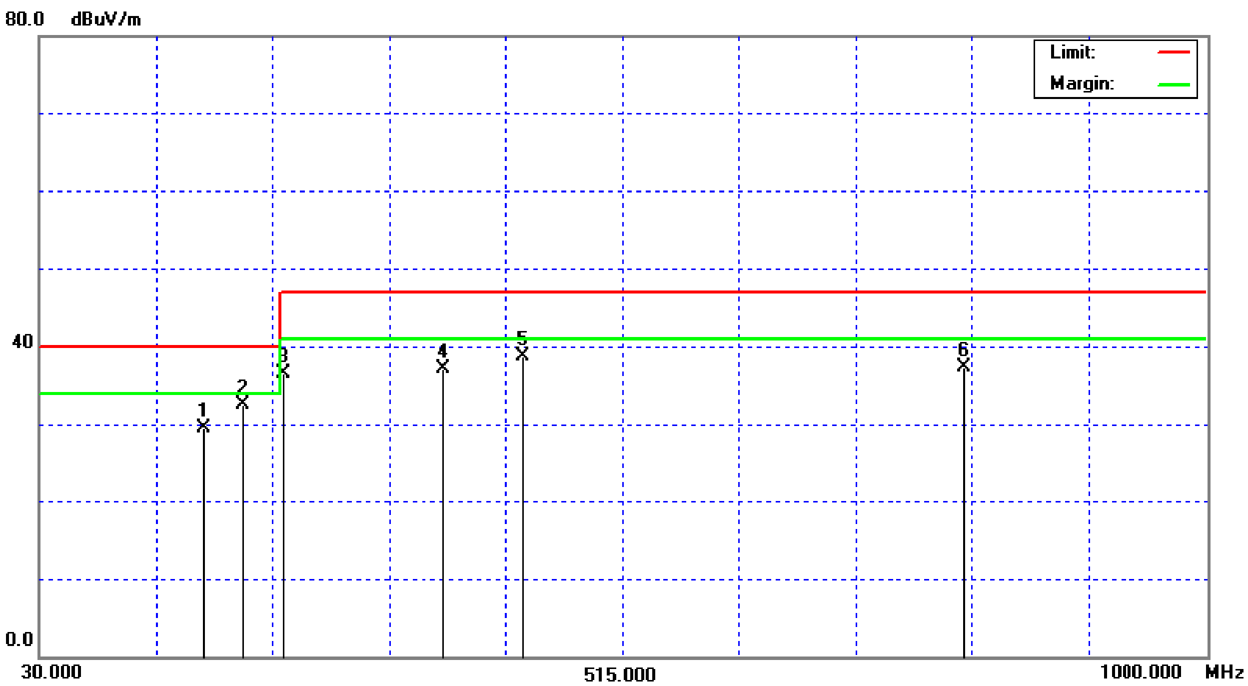
Remark：

(1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz ; SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz。

(2) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measure-ment didn't perform。

(3) Measuring frequency range from 30MHz to 1000MHz。

(4) If the peak scan value lower limit more than 20dB, then this signal data does not how in table。



E.U.T :	x86 Ready-to-Run Embedded Computer	Model Name :	V462
Temperature :	21˚C	Relative Humidity :	68%
Pressure :	1022 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	FULL SYSTEM		

Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
166.63	H	34.80	-3.57	31.23	40.00	- 8.77	
233.27	H	39.70	-5.00	34.70	47.00	- 12.30	
299.92	H	39.47	-2.34	37.13	47.00	- 9.87	
366.59	H	39.40	-0.97	38.43	47.00	- 8.57	
433.23	H	42.65	1.26	43.91	47.00	- 3.09	
499.88	H	40.80	2.69	43.49	47.00	- 3.51	

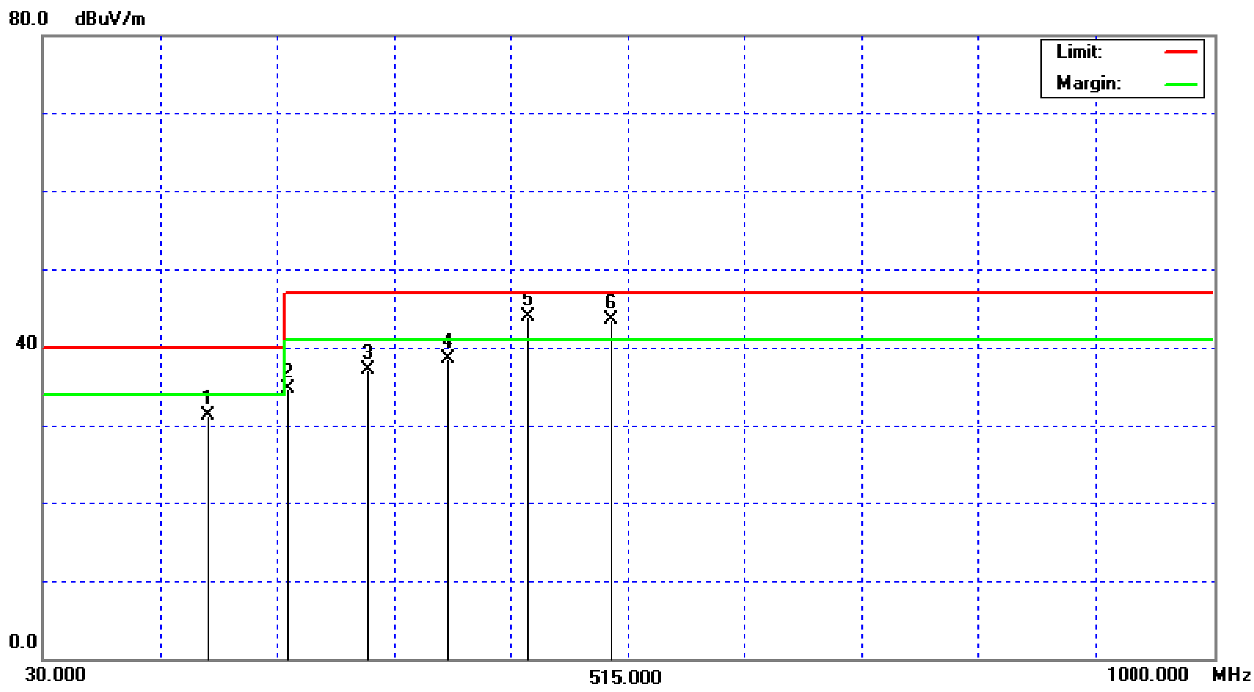
Remark：

(1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz；SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz。

(2) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measure-ment didn't perform。

(3) Measuring frequency range from 30MHz to 1000MHz。

(4) If the peak scan value lower limit more than 20dB, then this signal data does not how in table。



E.U.T :	x86 Ready-to-Run Embedded Computer	Model Name :	V466
Temperature :	18°C	Relative Humidity :	49%
Pressure :	1018 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	FULL SYSTEM		

Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
199.95	V	33.07	-8.00	25.07	40.00	- 14.93	
233.28	V	34.42	-6.41	28.01	47.00	- 18.99	
433.24	V	35.40	0.02	35.42	47.00	- 11.58	
499.88	V	33.62	1.41	35.03	47.00	- 11.97	
733.19	V	31.05	6.49	37.54	47.00	- 9.46	
866.45	V	29.82	8.04	37.86	47.00	- 9.14	

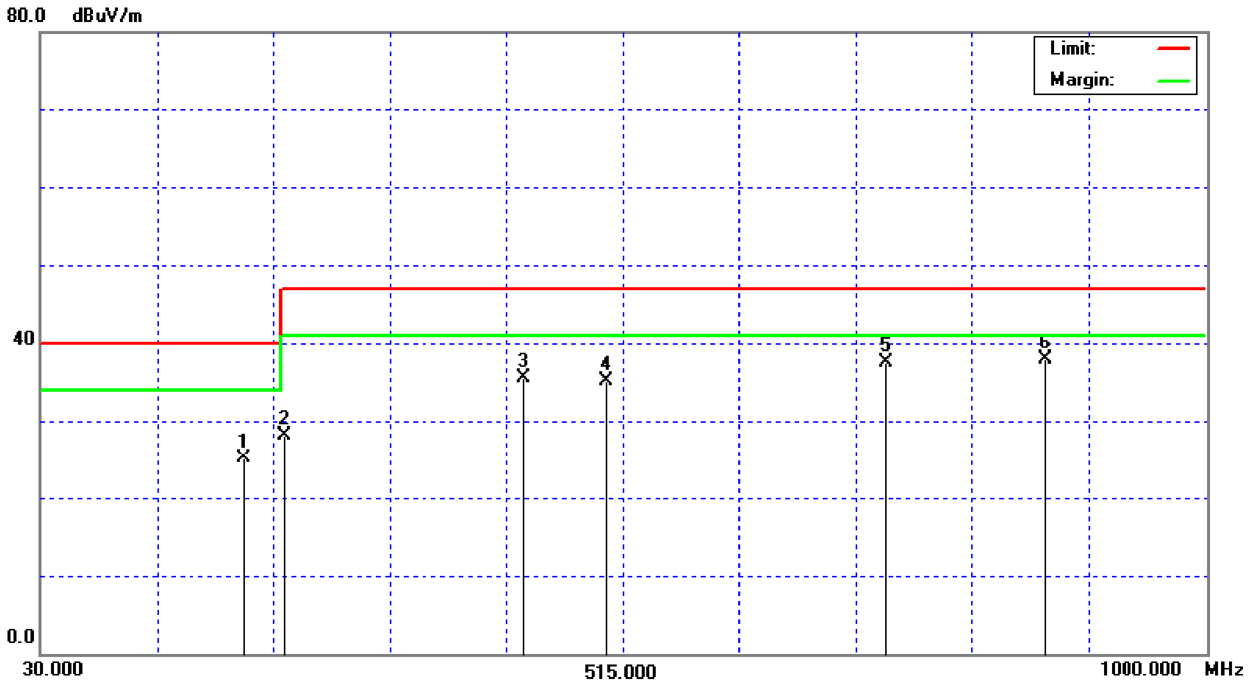
Remark：

(1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz；SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz。

(2) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measure-ment didn't perform。

(3) Measuring frequency range from 30MHz to 1000MHz。

(4) If the peak scan value lower limit more than 20dB, then this signal data does not how in table。



E.U.T :	x86 Ready-to-Run Embedded Computer	Model Name :	V466
Temperature :	18˚C	Relative Humidity :	49%
Pressure :	1018 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	FULL SYSTEM		

Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
233.28	H	35.32	-6.41	28.91	47.00	- 18.09	
299.94	H	39.80	-3.67	36.13	47.00	- 10.87	
366.58	H	38.00	-2.07	35.93	47.00	- 11.07	
399.92	H	32.60	-1.35	31.25	47.00	- 15.75	
733.17	H	31.62	6.49	38.11	47.00	- 8.89	
866.45	H	31.42	8.04	39.46	47.00	- 7.54	

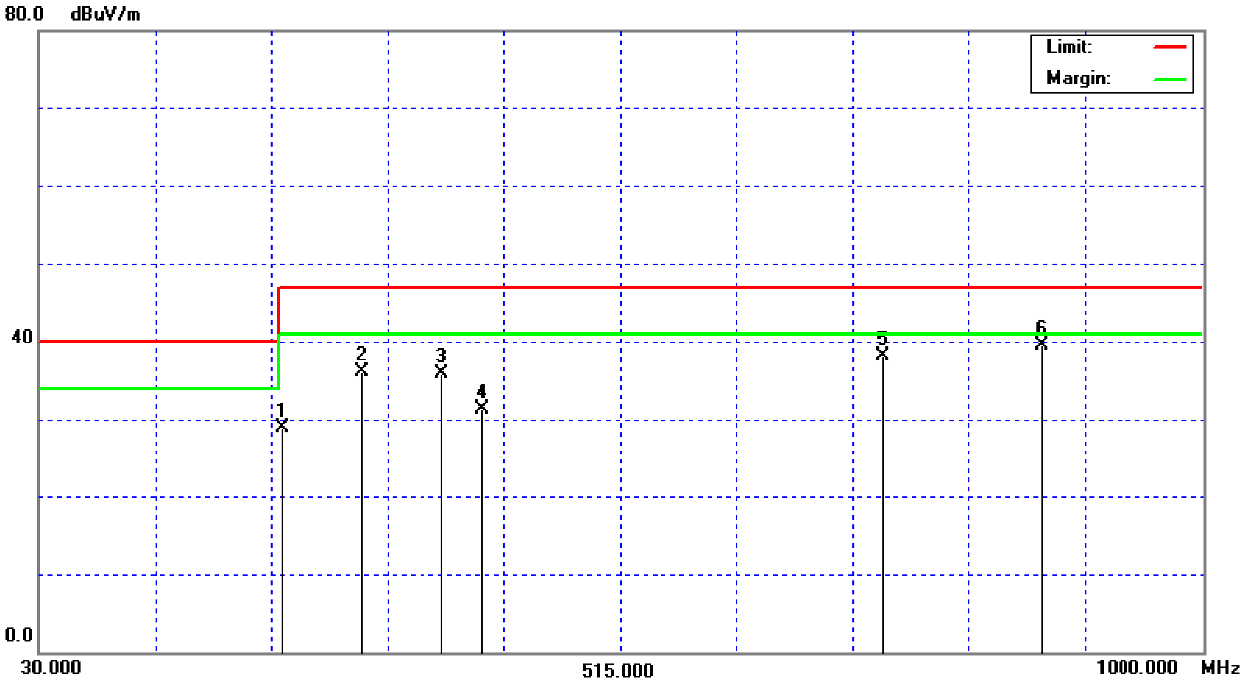
Remark：

(1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz；SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz。

(2) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measure-ment didn't perform。

(3) Measuring frequency range from 30MHz to 1000MHz。

(4) If the peak scan value lower limit more than 20dB, then this signal data does not how in table。



4.2.8 TEST RESULTS-ABOVE 1000MHZ

E.U.T :	x86 Ready-to-Run Embedded Computer	Model Name :	V462
Temperature :	26˚C	Relative Humidity :	57%
Pressure :	1009 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	FULL SYSTEM		

Freq. (MHz)	Ant.Pol. (H/V)	Reading(dBuV)		Ant./CF	Act.(dBuV/m)		Limit(dBuV/m)		Note
		Peak	AV	CF(dB)	Peak	AV	Peak	AV	
1032.00	V	57.83	-	-8.37	49.46	-	80.00	60.00	
1125.00	V	51.56	-	-7.98	43.58	-	80.00	60.00	
1184.00	V	54.08	-	-7.73	46.35	-	80.00	60.00	
1298.00	V	42.37	-	-7.25	35.12	-	80.00	60.00	
1326.00	V	58.12	-	-7.13	50.99	-	80.00	60.00	
1424.00	V	41.20	-	-6.72	34.48	-	80.00	60.00	

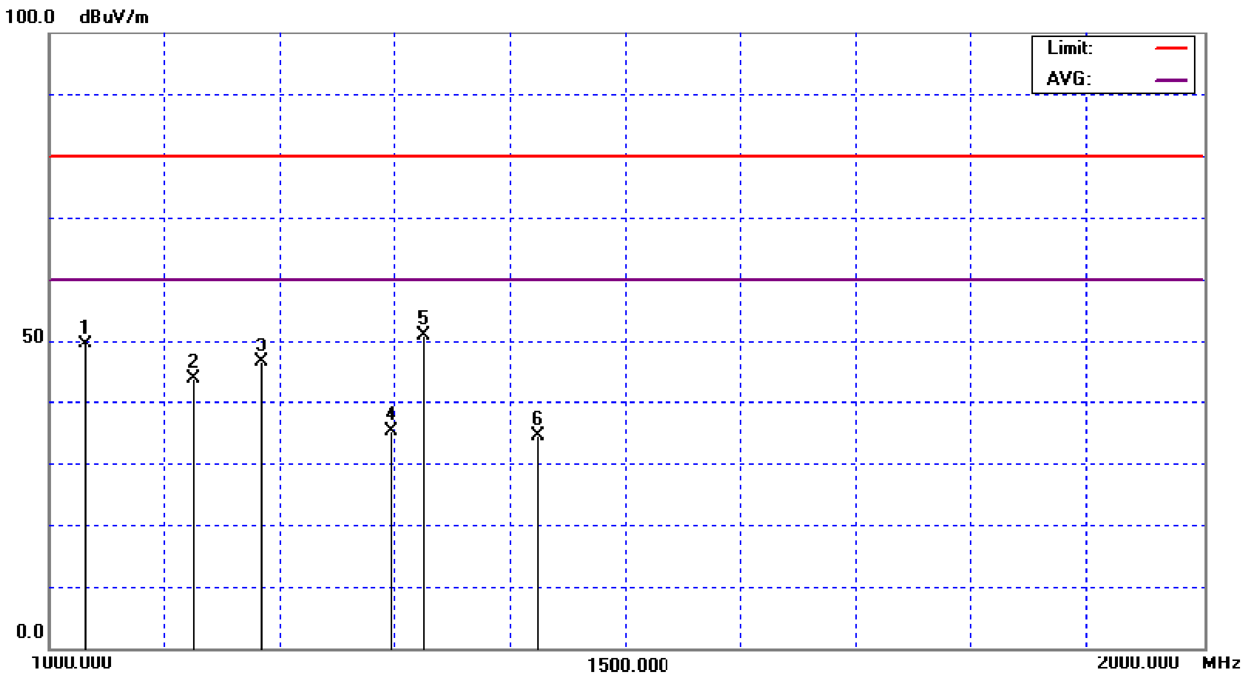
Remark：

(1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz；SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz。

(2) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measure-ment didn't perform。

(3) Measuring frequency range from 30MHz to 1000MHz。

(4) If the peak scan value lower limit more than 20dB, then this signal data does not how in table。



E.U.T :	x86 Ready-to-Run Embedded Computer	Model Name :	V462
Temperature :	26˚C	Relative Humidity :	57%
Pressure :	1009 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	FULL SYSTEM		

Freq.	Ant.Pol.	Reading(dBuV)		Ant./CF	Act.(dBuV/m)		Limit(dBuV/m)		Note
(MHz)	(H/V)	Peak	AV	CF(dB)	Peak	AV	Peak	AV	
1032.00	H	50.79	-	-8.37	42.42	-	80.00	60.00	
1062.00	H	53.32	-	-8.24	45.08	-	80.00	60.00	
1148.00	H	55.46	-	-7.88	47.58	-	80.00	60.00	
1228.00	H	57.36	-	-7.54	49.82	-	80.00	60.00	
1326.00	H	49.80	-	-7.13	42.67	-	80.00	60.00	
1424.00	H	48.87	-	-6.72	42.15	-	80.00	60.00	

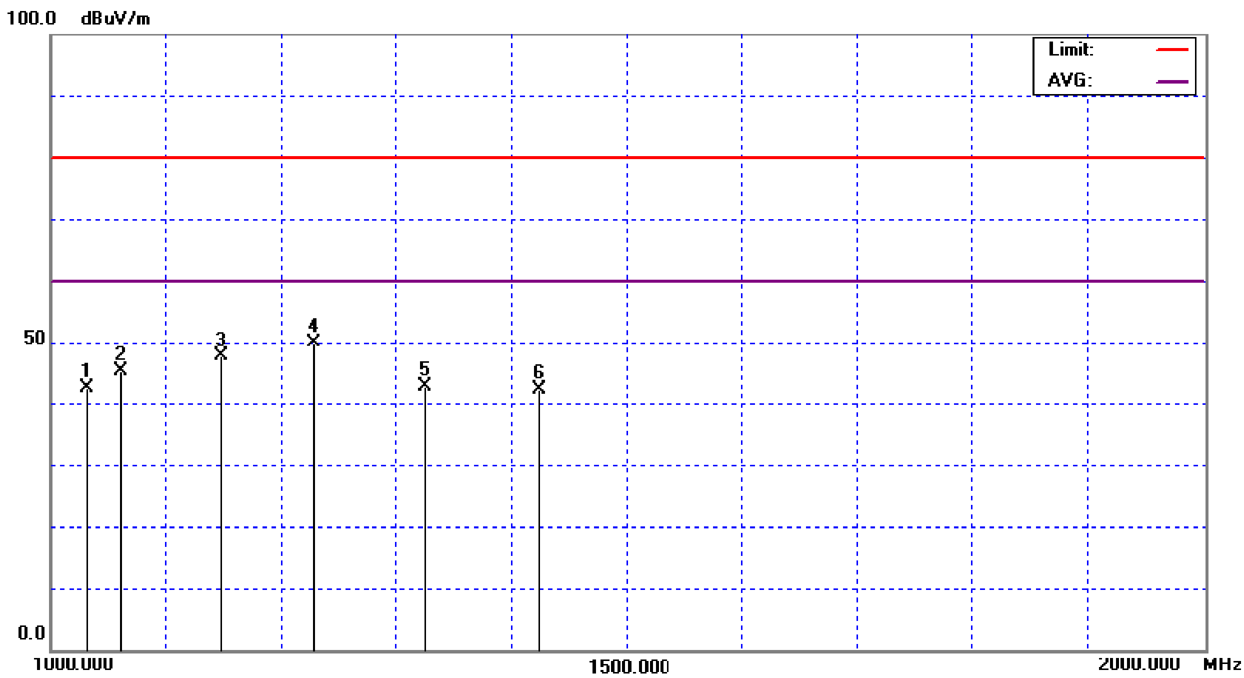
Remark：

(1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz ; SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz。

(2) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measure-ment didn't perform。

(3) Measuring frequency range from 30MHz to 1000MHz。

(4) If the peak scan value lower limit more than 20dB, then this signal data does not how in table。



E.U.T :	x86 Ready-to-Run Embedded Computer	Model Name :	V466
Temperature :	26°C	Relative Humidity :	57%
Pressure :	1009 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	FULL SYSTEM		

Freq.	Ant.Pol.	Reading(dBuV)		Ant./CF	Act.(dBuV/m)		Limit(dBuV/m)		Note
(MHz)	(H/V)	Peak	AV	CF(dB)	Peak	AV	Peak	AV	
1032.00	V	58.86	-	-8.37	50.49	-	80.00	60.00	
1125.00	V	50.77	-	-7.98	42.79	-	80.00	60.00	
1184.00	V	53.01	-	-7.73	45.28	-	80.00	60.00	
1298.00	V	43.91	-	-7.25	36.66	-	80.00	60.00	
1326.00	V	59.35	-	-7.13	52.22	-	80.00	60.00	
1424.00	V	40.17	-	-6.72	33.45	-	80.00	60.00	

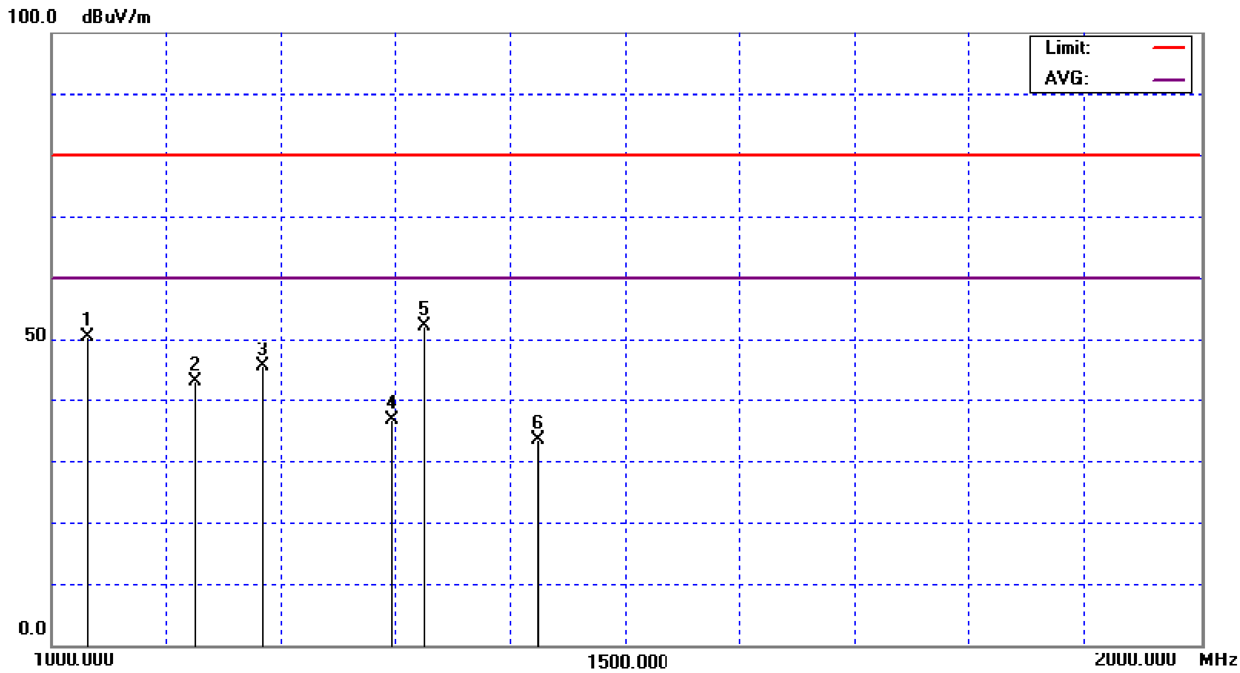
Remark：

(1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz；SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz。

(2) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measure-ment didn't perform。

(3) Measuring frequency range from 30MHz to 1000MHz。

(4) If the peak scan value lower limit more than 20dB, then this signal data does not how in table。



E.U.T :	x86 Ready-to-Run Embedded Computer	Model Name :	V466
Temperature :	26˚C	Relative Humidity :	57%
Pressure :	1009 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	FULL SYSTEM		

Freq.	Ant.Pol.	Reading(dBuV)		Ant./CF	Act.(dBuV/m)		Limit(dBuV/m)		Note
(MHz)	(H/V)	Peak	AV	CF(dB)	Peak	AV	Peak	AV	
1032.00	H	50.79	-	-8.37	42.42	-	80.00	60.00	
1062.00	H	53.32	-	-8.24	45.08	-	80.00	60.00	
1148.00	H	54.71	-	-7.88	46.83	-	80.00	60.00	
1228.00	H	58.23	-	-7.54	50.69	-	80.00	60.00	
1326.00	H	49.84	-	-7.13	42.71	-	80.00	60.00	
1424.00	H	53.69	-	-6.72	46.97	-	80.00	60.00	

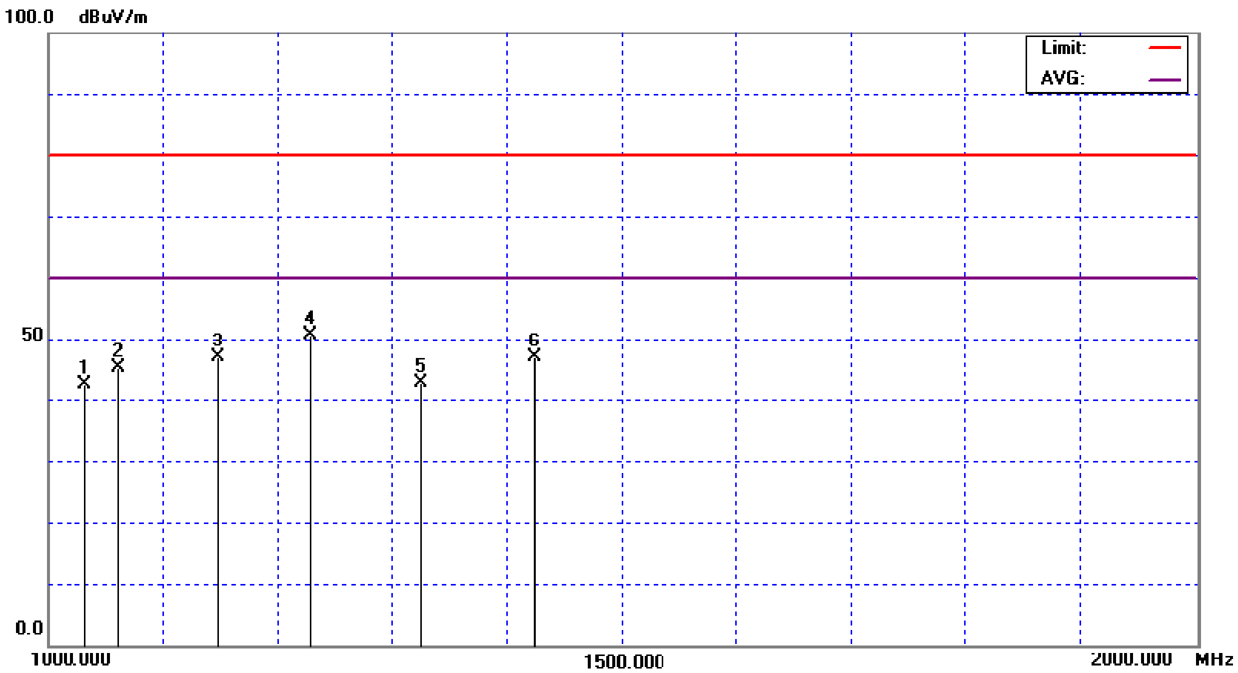
Remark：

(1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz；SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz。

(2) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measure-ment didn‘t perform。

(3) Measuring frequency range from 30MHz to 1000MHz。

(4) If the peak scan value lower limit more than 20dB, then this signal data does not how in table。



5. EUT TEST PHOTO

Conducted Measurement Photos

Model No.: V462





Conducted Measurement Photos

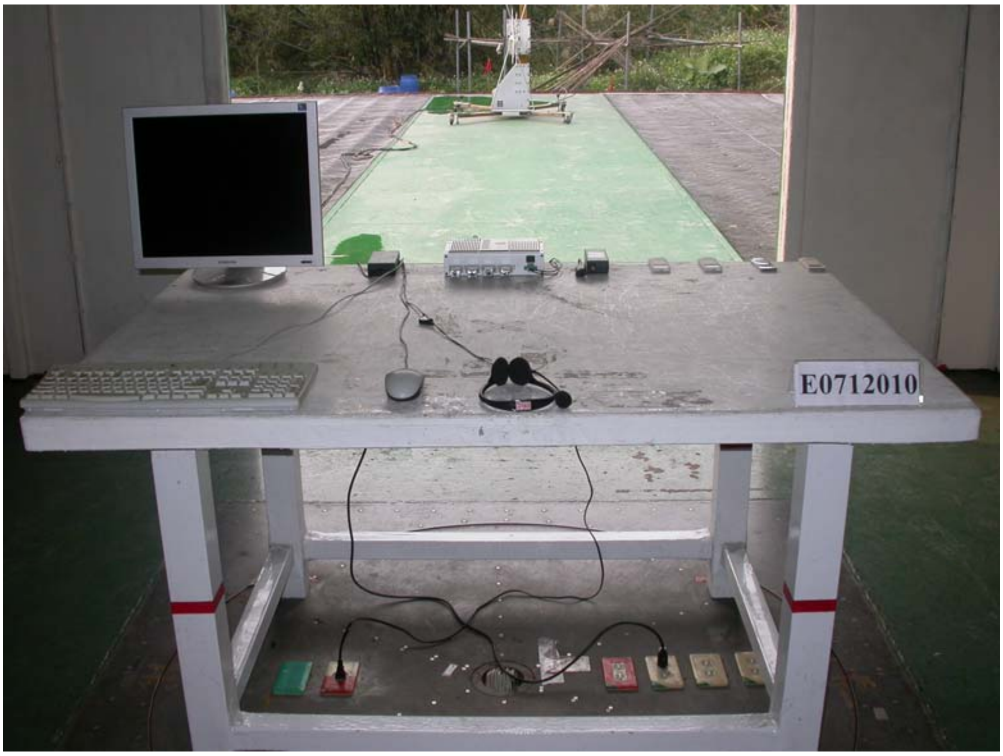
Model No.: V466





Radiated Measurement Photos

Model No.: V462





Radiated Measurement Photos

Model No.: V466



